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REMARKS

Claims 20 and 40 were rejected under 35 U.S.C. 103(a) as being unpatentable over Edlund in view of McKinney.

Claim 20 has been amended to specify that "said fuel cell
5 system is powered by said fuel cell" and to specify "a
*telecommunications link of said system powered by said fuel
cell*, for automatically ordering a refill of a source fuel for
said fuel cell system . . .". Claim 40 has been amended to
specify "powering said system with a fuel cell" as well as
10 "automatically ordering a refill of a source fuel for said fuel
cell system over a *telecommunications link of said fuel cell
system powered by said fuel cell*."

New claim 53 which is dependent on claim 20 specifies "said
fuel cell system further comprising an electronic device
15 thereof, wherein: said electronic device is powered by said fuel
cell; and said electronic device comprises said
telecommunications link of said fuel cell system powered by said
fuel cell." New claim 54 which is dependent on claim 21
similarly specifies "said fuel cell system further comprising an
20 electronic device thereof, and said electronic device comprising
said telecommunications link of said fuel cell system powered by
said fuel cell," as well as "the steps of: powering said
electronic device with said fuel cell; and ordering said refill
of said source fuel over said telecommunications link of said
25 electronic device."

As now specified in claims 20 and 40, applicants' fuel cell
provides power to the fuel cell system. Additionally, this fuel

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cell system, powered by the fuel cell, itself comprises the telecommunications link over which a refill of the source fuel is to be ordered from a supplier of source fuel replacements.

(See applicants' disclosure, page 23, lines 3-4:

- 5 "telecommunications link **334** [is] provided with, and as part of, the overall fuel cell system.") Thus, the fuel cell effectively serves to power the very telecommunications link which is used to reorder its source fuel.

- 10 Claims 53 and 54 specify the particular situation in which one takes advantage of a telecommunications link often preexisting in an electronic device powered by the fuel cell, as set forth in applicants' disclosure, page 22, line 22 through page 23 line 1: "for devices such as telephones, computers, personal digital assistants, and similar devices that have a
- 15 telecommunications link **334** such as a telephone or internet connection, fuel tank control and logic module **324**, once it has detected that the source fuel **330** had dropped below a desired level, automatically orders a source fuel **330** refill over telecommunications link **334**."

- 20 The above is neither disclosed nor suggested nor motivated by Edlund or McKinney, separately or in combination.

- McKinney discloses an apparatus for remotely monitoring and maintaining a chemical supply. There is nothing, however, which suggests or discloses or motivates powering McKinney's chemical
- 25 storage and chemical feed system, or McKinney's telemetry system, with the chemical supply itself. Indeed, unless the chemicals being stored were themselves fuels that could be used

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to provide power to McKinney's apparatus and thereby to the telemetry system - and there is nothing in McKinney to even remotely disclose, suggest or motivate this - it would in fact be *impossible* to use the chemical supply in McKinney to power the chemical storage and chemical feed system, or the telemetry system. McKinney does not disclose, suggest or motivate the use of chemicals which can act as a fuel supply for power for his apparatus or for his telemetry system (and the chemical situations which are discussed give no suggestion or motivation in this direction), and McKinney does not disclose, suggest or motivate any power-supplying connection from the chemical supply that is capable of powering the telemetry system. The only connection disclosed or suggested is a pure data connection, without any power.

The differences between applicants' invention and that of Edlund have already been discussed at great length in applicants' August 13, 2002 reply to the May 15, 2002 office action and applicants' February 27, 2003 reply to the January 8, 2003 office action and so will not be repeated here. However, several additional point are worthy of note at this time.

Edlund discloses a *fuel processing* system. But, this system does not use the fuel stock being processed to power itself, or to power any type of "telecommunications link . . . for automatically ordering from a supplier of source fuel replacements." In Edlund, "[f]uel processor **16** converts the feedstock into hydrogen gas, at least a significant portion of which is typically delivered to fuel cell stack **14**. Stack **14**

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uses the hydrogen gas to produce an electric current that may be used to meet the electrical load supplied by an associated electrical device 22, such as a vehicle, boat, generator, household, etc." (column 2, lines 30-35) There is nothing in Edlund to disclose, suggest, or motivate using the fuel stock being processed or the hydrogen gas being produced to itself power the fuel processing system, or to power any of Edlund's "communications pathways" (column 3, lines 30-31). Nor, as has been discussed in applicants' previous replies, does Edlund disclose, suggest or motivate "ordering from a supplier of source fuel replacements." Edlund's system is a closed system which feeds fuel from a directly-connected "external source" akin to applicants' source fuel reservoir 326, and applicants in their February 27, 2003 office action reply have expressly disclaimed any interpretation of claims 20 and 40 "in the broader sense of a controller directing that the fuel be added to the supply from an external fuel source directly connected to the fuel cell system."

In sum, what makes applicants' amended claims 20 and 40 and new claims 53 and 54 novel and nonobvious over the cited combination of Edlund and McKinney, and all other art of record, is the fact that the very device and / or fuel cell system which is being powered by the fuel cell also comprises the telecommunications link which is used for "automatically ordering a refill of a source fuel . . . from a supplier of source fuel replacements." In this manner, by powering a system or device which itself comprises a telecommunications link, the

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source fuel powers the means of its own replacement. This takes advantage of the fact as pointed out in page 22, line 22 through page 23 line 1 of this disclosure that the electronic devices to be powered by a fuel cell system typically comprise some form of telecommunications link which can be used not only for their usual purpose of communicating with other electronic devices (e.g., one telephone communicating with another), but also for automatic reordering, and that a telecommunications link can readily be provided as part of a fuel cell system for electronic "devices which do not have such a telecommunications link." (Applicants' disclosure, page 23, line 2)

Undisclosed, unsuggested, unmotivated modifications would be needed for both Edlund and McKinney to achieve applicants' the synergistic result of having a source fuel power its own reordering. Edlund and McKinney are complete by themselves, so no such modification are anticipated or rendered obvious.

Consequently, applicants respectfully request allowance of claims 20, 40, 53 and 54, in addition to all other claims which have already been allowed, and look forward to a notice of allowance on the near future.

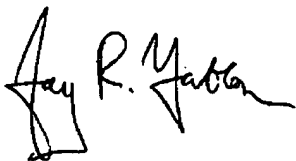
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

1 20. (thrice amended) A fuel cell system, wherein said fuel
2 cell system is powered by said fuel cell, comprising:
3 a telecommunications link of said fuel cell system powered
4 by said fuel cell, for automatically ordering a refill of a
5 source fuel for said fuel cell system, in response to a
6 measurement of how much of said source fuel remains in a fuel
7 tank of said fuel cell system; wherein:
8 said ordering comprises ordering from a supplier of source
9 fuel replacements.

1 40. (thrice amended) A method for maintaining a fuel level in
2 a fuel tank of a fuel cell system, comprising the steps of:
3 powering said system with a fuel cell;
4 automatically ordering a refill of a source fuel for said
5 fuel cell system over a telecommunications link of said fuel
6 cell system powered by said fuel cell, in response to a
7 measurement of how much of said source fuel remains in said fuel
8 tank; wherein:
9 said ordering comprises ordering from a supplier of source
10 fuel replacements.

Respectfully submitted,



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